

GILA RIVER BASIN

09432000 GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, NM

LOCATION--Lat 32°38'53", long 108°50'43", in SE1/4SW1/4 sec. 18, T.19 S., R.19 W., Grant County, Hydrologic Unit 15040002, on left bank at head of canyon, 1.4 mi downstream from Blue Creek, 10 mi east of Virden, and 16 mi upstream from New Mexico-Arizona State line.

DRAINAGE AREA--3,203 mi², excluding Animas River basin.

PERIOD OF RECORD--May to Nov. 1914, Mar. to Sept. 1915, July 1927 to current year. July 1927 to May 1931 monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi downstream, and in Sunset Canal. Published as "Gila River near Duncan, Ariz., 1914-15 and as "Gila River at Fuller's Ranch, near Duncan, Ariz., 1931-38.

REVISED RECORDS--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M).

GAGE--Water-stage recorder. Elevation of gage is 3,875 ft above sea level, from river-profile map. May 11, 1914, to Sept. 30, 1915, at site 6 mi downstream, 1,000 ft upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum. Since Apr. 18, 1980, supplementary gage on left bank 800 ft downstream at same datum. Since June 1980, crest-stage gages at supplementary gage site. Since Nov. 1990, water-stage recorder at supplementary gage.

REMARKS--Records fair except for estimated daily discharges, which are poor. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres above station.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 58,700 ft³/s Dec. 19, 1978, gage height, 29.00 ft, from rating curve extended above 38,000 ft³/s on basis of slope-area measurement of peak flow; minimum, 1 ft³/s July 14, 1934.

EXTREMES FOR CURRENT YEAR--Peak discharges greater than base discharge of 1,900 ft³/s and (or) maximum (*):

	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
	Oct. 7	1345	*7,920	*9.34

Minimum daily discharge, 3.8 ft³/s July 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	72	88	91	75	102	226	109	34	12	13	e98
2	53	72	88	91	74	106	200	107	33	12	12	e84
3	52	73	92	89	71	112	190	108	31	11	13	e65
4	51	74	92	89	68	113	188	105	29	11	12	57
5	51	75	94	89	68	114	184	103	27	11	11	54
6	50	75	95	87	69	115	184	101	25	11	9.9	46
7	1330	72	95	84	69	116	180	98	23	9.8	9.5	40
8	189	73	94	84	69	116	172	96	20	8.5	9.6	39
9	101	73	93	85	71	116	164	93	17	7.8	8.8	43
10	85	75	94	85	69	121	158	88	15	7.4	8.3	44
11	80	76	93	86	68	127	151	79	14	7.5	8.1	42
12	77	77	91	87	67	130	145	79	13	7.6	8.0	37
13	74	78	87	88	70	135	140	75	12	e7.7	8.7	41
14	71	77	88	88	75	139	141	68	11	e7.1	9.2	48
15	72	74	90	88	77	145	140	66	10	6.5	9.5	55
16	71	74	90	85	85	153	147	63	10	6.1	10	49
17	69	76	90	85	85	162	156	60	11	5.9	11	48
18	68	75	91	84	83	183	158	54	12	5.8	34	29
19	71	75	91	84	83	203	154	52	13	5.4	21	24
20	72	74	93	83	84	217	144	54	13	4.9	16	21
21	72	74	94	82	86	224	139	53	13	4.5	18	17
22	73	79	93	82	86	231	134	53	12	4.5	19	e14
23	72	84	95	83	93	227	128	51	11	4.2	20	e15
24	70	83	96	84	85	233	123	49	10	3.8	22	14
25	69	83	96	83	95	265	120	46	10	7.0	36	14
26	69	84	96	82	98	282	117	44	10	12	26	18
27	70	84	94	81	97	293	117	43	9.9	10	31	36
28	72	85	92	82	99	294	117	42	10	11	194	77
29	70	87	91	81	---	276	112	38	12	11	123	24
30	68	87	90	80	---	265	110	37	13	15	93	19
31	71	---	89	77	---	255	---	36	---	14	86	---
TOTAL	3518	2320	2855	2629	2219	5570	4539	2150	483.9	263.0	910.6	1212
MEAN	113	77.3	92.1	84.8	79.2	180	151	69.4	16.1	8.48	29.4	40.4
MAX	1330	87	96	91	99	294	226	109	34	15	194	98
MIN	50	72	87	77	67	102	110	36	9.9	3.8	8.0	14
AC-FT	6980	4600	5660	5210	4400	11050	9000	4260	960	522	1810	2400
CFSM	0.04	0.02	0.03	0.03	0.02	0.06	0.05	0.02	0.01	0.00	0.01	0.01
IN.	0.04	0.03	0.03	0.03	0.03	0.06	0.05	0.02	0.01	0.00	0.01	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2003, BY WATER YEAR (WY)

MEAN	161	138	244	302	347	418	266	147	49.6	74.1	199	200
MAX	1667	1040	2485	4158	1752	1464	1138	977	298	366	1164	1507
(WY)	1973	1995	1979	1993	1993	1973	1973	1992	1992	1986	1988	1975
MIN	5.39	34.9	47.6	64.0	61.1	45.1	27.7	13.5	4.43	4.85	9.35	4.89
(WY)	1957	1957	1981	1971	1971	1955	1956	1956	1951	1951	1951	1953

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1932 - 2003

ANNUAL TOTAL	30074.1	28669.5										
ANNUAL MEAN	82.4	78.5										
HIGHEST ANNUAL MEAN												
LOWEST ANNUAL MEAN												
HIGHEST DAILY MEAN	2360	Sep 12	1330	Oct 7								
LOWEST DAILY MEAN	3.0	Jul 13	3.8	Jul 24								
ANNUAL SEVEN-DAY MINIMUM	3.2	Jul 1	4.7	Jul 18								
ANNUAL RUNOFF (AC-FT)	59650		56870									
ANNUAL RUNOFF (CFSM)	0.026		0.025									
ANNUAL RUNOFF (INCHES)	0.35		0.33									
10 PERCENT EXCEEDS	98		144									
50 PERCENT EXCEEDS	69		75									
90 PERCENT EXCEEDS	9.8		10									

e Estimated